

Complete Summary

GUIDELINE TITLE

Tobacco use cessation in the primary care setting.

BIBLIOGRAPHIC SOURCE(S)

Tobacco use cessation in the primary care setting. Department of Veterans Affairs (U.S.); 1999 May. Various p. [45 references]

COMPLETE SUMMARY CONTENT

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SCOPE

DISEASE/CONDITION(S)

Tobacco use

GUIDELINE CATEGORY

Management
 Prevention
 Risk Assessment
 Screening
 Treatment

CLINICAL SPECIALTY

Family Practice
 Internal Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

To assist practitioners in the use of evidence-based medicine for management of persons who use tobacco products

TARGET POPULATION

Any person who is eligible for care in the Veterans Health Administration or the Department of Defense health care delivery system (including adults, and students in elementary and middle schools)

INTERVENTIONS AND PRACTICES CONSIDERED

Screening/Assessment

1. Assess tobacco status, readiness to quit, availability of tobacco cessation programs, and person's willingness to attend a program (such as Quit Smart, American Lung Association Freedom from Smoking Program, Group Health of Puget Sound program).
2. Address comorbid medical and psychiatric conditions/risks to determine whether the person has other clinical conditions that need prioritized intervention before instituting a tobacco cessation program.
3. For persons ready to quit, provide additional assessment as appropriate:
 - Fagerstrom Nicotine Tolerance Questionnaire
 - Physiological measures (carbon monoxide, urine or serum nicotine or cotinine level, or pulmonary function tests)
 - Self administered test – “Why Do I Smoke?”

Management/Treatment

1. Initiate interventions (series of office visits) addressing the patient's interest in quitting, severity of tobacco dependence and withdrawal symptoms, length of previous quit attempts, reasons for relapse, appropriateness of behavioral and pharmacotherapy, the reasons why they use tobacco (stress control, habit, pleasure, etc.), and concerns about consequences of quitting such as weight gain.
2. Advise quitting.
3. Provide self-help reading material (a detailed list can be found in Appendix 4 of the original guideline document).
4. Establish a quit date, encourage use of behavioral techniques to disrupt the habits and rituals of tobacco use schedule follow-up visits within 1 to 2 weeks of the quit date.
5. Initiate pharmacological treatment as appropriate:
Nicotine replacement products (NRT):
 - Transdermal delivery system (patches)
 - Polacrilex resin (gum)

- Nasal spray
- Oral vapor inhaler

Non-nicotine replacement products:

- Bupropion SR (sustained release)
6. Initiate/reinforce relapse prevention:
 - Discuss benefits of quitting
 - Problem solving
 7. Address reasons for unwillingness to quit.
 8. Determine medical/psychological risks of continued use (acute health risks, long-term health risks, environmental risks).
 9. Promote motivation to quit using a motivational technique characterized by the "four Rs: " relevance, risks, rewards, and repetition.

Risk Assessment/Prevention

1. Assess risk for starting tobacco use (from information obtained during history and physical at office visits).
2. Assess risk for relapse in persons who have stopped smoking and determine if relapse prevention counseling is advisable (assess individual, social and environmental factors that relate to an increased likelihood for relapse).
3. Initiate tobacco use prevention focused interventions that are age and developmentally appropriate.

MAJOR OUTCOMES CONSIDERED

- Efficacy of treatment
- Patient satisfaction

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The Medical Subject Headings terms used for the search were: key therapies in tobacco use cessation treatment, study characteristics, and study design. In this search, "study characteristics" were those of analytic studies, case-control studies, retrospective studies, cohort studies, longitudinal studies, follow-up studies, prospective studies, cross-sectional studies, clinical protocols, controlled clinical trials, randomized clinical trials, intervention studies, and sampling studies. Study design included crossover studies, double-blind studies, matched pair analysis, meta-analysis, random allocation, reproducibility of results, and sample size.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence Grading

- A. Randomized controlled trials
- B. Well-designed clinical and epidemiological studies
- C. Panel consensus

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Michael C. Fiore, M.D., M.P.H., chaired the Agency for Health Care Policy and Research (AHCPR) Smoking Cessation Guideline Panel, which reviewed 3,000 articles and selected 300 as a database for meta-analysis to provide a valid synthesis of smoking cessation treatment outcome data. The Panel made numerous recommendations based upon these data, each of which carries a strength of evidence rating indicating the quality and quantity of empirical support. Throughout this Veterans Health Administration/Department of Defense Guideline, references to Fiore reflect ratings assigned by the AHCPR panel for the specific meta-analysis cited. The meta-analysis was graded by this Tobacco Use Cessation Working Group as Level of evidence (LE) = A and Strength of Recommendation (SR) = I. This grade is applied to all evidence attributed to Fiore in this guideline. When the LE or SR diverged on a particular aspect of diagnosis or treatment, pertinent articles were reviewed and graded in this guideline.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The guideline recommendations are the product of many months of consensus building among knowledgeable individuals including internists, family practitioners, primary care physicians, nurses, pharmacologists, social workers, program specialists in geriatrics, external peer review physicians, and expert consultants in the field of guideline and algorithm development.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Strength of Recommendation Grading

- I. Usually indicated, always acceptable, and considered useful and effective.
- IIa. Acceptable, of uncertain efficacy, and may be controversial. Weight of evidence is in favor of usefulness/efficacy.
- IIb. Acceptable, of uncertain efficacy and may be controversial. May be helpful, not likely to be harmful.
- III. Not acceptable, of uncertain efficacy and may be harmful. Does not appear in the guidelines.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not applicable

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The recommendations for tobacco use cessation in the primary care setting are organized into one major algorithm. The algorithm and a summary of the annotations that accompany it are presented below.

[Algorithm](#)

Summary Annotations

A. Any Person Encountering the VHA/DoD Health Care Delivery Systems

Definition

Any person who is eligible for care in the Veterans Health Administration (VHA) or the Department of Defense (DoD) health care delivery system should be screened for tobacco use as defined in this guideline.

B. Assess Tobacco Status

Objective

To determine the person's current use of tobacco.

Annotation

All persons should be asked about their use of tobacco upon visiting any provider. This is easily accomplished when the person's vital signs are taken. The tobacco use status should be noted in the person's record. Repeated assessment is not necessary in the case of the adult who has never used tobacco or has not used tobacco for many years and for whom this information is clearly documented in the medical record. The clinician can proceed further based on clinical relevance and appropriateness.

C. Is Person a Current Tobacco User?

Objective

To identify persons who are "tobacco users" as specified in this guideline.

Annotation

A "tobacco user" is a person who answers "yes" when asked whether he or she uses tobacco products.

D. Assess Readiness to Quit. Advise Quitting

Objective

To ascertain the person's willingness to quit using tobacco.

Annotation

The medical record of tobacco users who regularly visit a clinic should document at least three assessments for willingness to quit per year. Those visiting a clinic on fewer than three occasions should be assessed at every visit. Although tobacco status is to be assessed periodically throughout the year, there is no requirement that counseling about tobacco cessation should be offered at every visit. Helpful approaches in determining the person's position on the use of tobacco and/or readiness to change include:

1. State that the person's health would improve if he or she were to quit smoking.
2. Deal with the subject of addiction to tobacco in a nonjudgmental way.
3. Link health concerns to tobacco use by giving advice linking the person's chief complaint to smoking, e.g., "If you would quit smoking you wouldn't be so short of breath."

E. Is Tobacco Cessation Program Available and Is Person Willing to Attend?

Objective

To refer the tobacco user to a tobacco cessation program, if available.

Annotation

To be most effective, the treatment of tobacco dependence should include either individual or group counseling. There is a strong relationship between the intensity of counseling and successful recovery from tobacco dependence. Intensive interventions are most effective and should be used when resources permit.

F. Address Comorbid Conditions

Objective

To determine whether the person has other clinical conditions that need prioritized intervention before instituting a tobacco cessation program.

Annotation

Persons must be assessed for any medical and/or psychiatric problems that may adversely affect the intervention. In the person's plan of treatment the following conditions need to be identified and treated before referral to a tobacco use cessation program.

1. Medical conditions:

Chronic pain disorder (chronic pain will increase after stopping nicotine from tobacco or NRT).

2. Psychiatric conditions/risks:

- a. Substance use disorder.
- b. Depression.
- c. Psychosis.
- d. Post-traumatic stress disorder.
- e. Eating disorders.
- f. Anxiety.

G. Initiate Intervention

Objective

To provide an office-based approach for the tobacco user who is not referred to an intensive intervention program.

Annotation

Every tobacco user should be offered at least brief or minimal support by the primary care manager/primary care provider. The success correlates directly with the length of time spent (3 to 10 minutes minimum) with the smoker over multiple visits for a variety of related and non-tobacco related conditions.

The essential elements of the brief visits will include eliciting the patient's interest in quitting, severity of tobacco dependence and withdrawal

symptoms, length of previous quit attempts and reasons for relapse, appropriateness of behavioral and pharmacotherapy, the reasons why they use tobacco (stress control, habit, pleasure, etc.), and patients concerns about consequences about quitting such as weight gain.

The primary care manager/primary care provider can provide self-help reading material (see Appendix 4 in the original guideline document), prescribe the medications that are appropriate (see Appendix 2 in the original guideline document), establish a quit date, encourage use of behavioral techniques to disrupt the habits and rituals of tobacco use and schedule follow-up visits within 1 to 2 weeks of the quit date.

H. Pharmacological Treatment

Objective

To facilitate abstinence through provision of pharmacological therapy to treat tobacco dependence.

Annotation

Pharmacological therapy can be divided into nicotine replacement products and non-nicotine products. Every person who answers "no" should be offered pharmacotherapy except when medically contraindicated. Selection should be based on a review of the risks and benefits for each drug and the person's preference. Appendix 2 in the original guideline document, "Pharmacology," includes a comprehensive review of these drugs. Appendix 3 in the original guideline document, "Treatment/Cost," rates the relative cost of dosing.

I. Self-Help Material

Objective

To assist the person in learning about the benefits of quitting.

Annotation

Provide the person with self-help material. Provide Primary Care Managers and Primary Care Providers with "How To" literature and a list of established "Stop Smoking" programs available. (See Appendix 4 in the original guideline document, "Self-Help Material").

J. Initiate/reinforce Relapse Prevention

Objective

To reinforce and motivate abstinence from tobacco and prevent future relapses (tertiary prevention).

Annotation

Most tobacco relapses occur within the first three months after cessation, but some relapses occur years after quitting. Telephone calls, clinic visits, or any time the clinician encounters a former tobacco user can be appropriate times to accomplish intervention for relapse prevention. Minimal relapse prevention should be part of every primary care encounter with persons who have recently quit. Minimal reinforcement approaches can be expressed as:

1. Offer congratulations on quitting.
 2. Encourage the person to continue tobacco free.
 3. Encourage active discussion of the benefits of quitting by asking the person open-ended questions designed to include the person's problem solving on:
 - a. Anticipated health benefits derived from cessation.
 - b. Success the person has had in quitting.
 - c. The most notable tobacco withdrawal symptoms experienced.
 - d. Problems or threats anticipated or encountered while maintaining abstinence (e.g., weight gain; negative mood, depression, or anxiety; prolonged withdrawal symptoms; and lack of social support for cessation.
- K. Address Reasons for Unwillingness to Quit. Determine Medical/Psychological Risks of Continued Use

Objective

To determine the existence of any medical or psychological conditions that may have predictable adverse outcomes if the person does not stop using tobacco products.

Annotation

There are special target populations of smokers who need to be identified and referred for intervention because of the high likelihood of adverse outcomes that accompany continued tobacco use. These include:

1. Pregnancy: Due to increased risk to the mother and potential fetal prematurity, all pregnant patients should be encouraged to stop smoking as early in pregnancy as possible. (See the discussion about use of medications during pregnancy in Annotation H, above.)
 2. Chronic tobacco related disease: Smokers who have developed a progressive, chronic tobacco related disease (emphysema, coronary artery disease, peripheral vascular disease) that will continue to deteriorate should be urged to make an attempt to quit tobacco during routine primary care for those disorders.
 3. Complications of surgical anesthesia: Smoking cessation should be addressed with all preoperative patients. If tobacco users will quit smoking 4 to 6 weeks prior to anesthesia, complications and postoperative recovery (infections, wound healing, cardiac procedures) can be reduced.
- L. Promote Motivation to Quit

Objective

To provide guidance and encouragement to heighten the motivation to quit tobacco use.

Annotation

The primary care manager/primary care provider should use a motivational technique characterized by the "four Rs:" Relevance, Risks, Rewards, and Repetition.

1. Relevance: Motivational information given to a person has the greatest impact if it is relevant to a person's disease status, family life or social situation.
2. Risks: Ask the person to identify the potential negative consequences of smoking; then discuss the most relevant risks for the person in detail.
3. Rewards: Ask the person to identify the potential benefits of quitting smoking. Highlight and elaborate on the benefits that are most relevant to the person.
4. Repetition: The motivational intervention should be repeated when an unmotivated person visits the primary care manager/primary care provider in a primary care setting.

M. Assess Risk for Starting Tobacco Use

Objective

To assess the potential for tobacco use in persons who have never used tobacco, based on existing risk factors.

Annotation

The primary care manager/primary care provider can help identify the following information derived in the history and physical

1. The role of the family.
2. Societal/cultural expectations.
3. Tobacco industry's promotion.
4. Military recruits.
5. Low educational attainment.

N. Assess Risk for Relapse

Objective

To assess former tobacco user's risk of relapse and determine if relapse prevention counseling is advisable at this stage.

Annotation

Tobacco use has been characterized as a chronic relapsing disorder due to the high frequency of relapse after a single quitting attempt. Indeed, relapse rates of up to 89 percent are expected among previous tobacco users who have achieved cessation after a single quitting attempt, cold turkey. However,

cumulative success rates over multiple quitting attempts may improve the success rate.

<strong

O. Initiate Prevention

Objective

To educate potential tobacco users and prevent them from ever starting (primary prevention).

Annotation

There are many reasons to address prevention in the early and middle school age groups. This group of children and young adults are very susceptible to adult role models and peer pressure. Tobacco use prevention pamphlets can be very informative and address age appropriate issues.

CLINICAL ALGORITHM(S)

An [algorithm](#) is provided in the guideline document for tobacco use cessation in the primary care setting.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The expanded annotations which accompany the algorithm in the guideline document indicate whether each recommendation is based on scientific data or expert opinion. Where existing literature is ambiguous or conflicting, and where scientific data are lacking on an issue, recommendations are based on the expert panel's opinion and clinical experience.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Early detection of tobacco use
- Decreased rates of tobacco use
- Increased rates of smoking cessation
- Prevention of tobacco use in students who have not starting using tobacco
- Decreased rates of relapse in persons who have quit tobacco use.
- Flexibility to accommodate local policies or procedures, including those regarding staffing patterns and referral to or consultation with other health care providers.
- Appropriate management of tobacco use in target population

Subgroups Most Likely to Benefit:

There are special target populations of smokers who need to be identified and referred for intervention because of the high likelihood of adverse outcomes that accompany continued tobacco use. These include:

1. Pregnancy - Due to increased risk to the mother and potential fetal prematurity, all pregnant patients should be encouraged to stop smoking as early in pregnancy as possible.
2. Chronic tobacco related disease - Smokers who have developed a progressive, chronic tobacco related disease (emphysema, coronary artery disease, peripheral vascular disease) that will continue to deteriorate should be urged to make an attempt to quit tobacco during routine primary care for those disorders.
3. Complications of surgical anesthesia - Smoking cessation should be addressed with all pre-operative patients. If tobacco users will quit smoking 4 to 6 weeks prior to anesthesia, complications and postoperative recovery (infections, wound healing, cardiac procedures) can be reduced.

POTENTIAL HARMS

- Nicotine Transdermal (patch): Tobacco users equaling fewer than 10 cigarettes a day may lose their tolerance to nicotine and experience light-headedness and nausea. Up to 50 percent of persons may experience dermatological side effects from the patches, usually mild itching and erythema.
- Nicotine Polacrilex Resin (gum): Some persons may have difficulty following instruction to "park" the gum and may treat it like regular chewing gum resulting in nausea or gastrointestinal upset. The gum sticks to dentures and may dislodge fillings and inlays because of its density.
- Nicotine Nasal Spray: There is a higher risk of nicotine dependence because of its rapid onset and user control of nicotine delivery. Local irritant adverse effects include nasal and throat irritation, runny nose, sneezing, watery eyes, and cough.
- Nicotine Oral Vapor Inhaler: There is a high incidence (about 66 percent) of mouth and throat irritation. There is a high residual level of nicotine in discarded cartridge (a danger to children and pets).
- Bupropion SR: There is potential to lower the seizure threshold in some individuals.

CONTRAINDICATIONS

CONTRAINDICATIONS

- Nicotine replacement products: Contraindications include allergy and pregnancy (Risk Category D).
- Polacrilex nicotine: Contraindications include allergy and pregnancy (Risk Category X).
- Nasal spray nicotine: Contraindications include allergy and pregnancy (Risk Category D).
- Oral vapor nicotine-inhaler: Contraindications include allergy and pregnancy (Pregnancy Category D).

- Bupropion SR: Contraindications include seizure disorders, predisposition to seizures, monoamine oxidase inhibitors, allergy (Pregnancy Category B).

QUALIFYING STATEMENTS

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The reader is reminded that this document is intended as a guideline and accordingly, should not supersede the clinical judgment of the health care provider.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Explicit indicators to measure implementation system wide are a part of the Veterans Health Administration's performance measurement system and are described in the Technical Manual available from the [Department of Veterans Affairs \(VA\) Web site](#).

RELATED NQMC MEASURES

- [Tobacco cessation: percent of patients screened annually for use of tobacco \(primary care cohort\).](#)
- [Tobacco cessation: percent of patients screened annually for use of tobacco \(mental health diagnosis cohort\).](#)
- [Tobacco cessation: percent of patients using tobacco who have been counseled three times in twelve months to cease tobacco use \(primary care cohort\).](#)
- [Tobacco cessation: percent of patients using tobacco who have been counseled three times in twelve months to cease tobacco use \(mental health diagnosis cohort\).](#)
- [Tobacco cessation: percent of patients currently not using tobacco \(primary care cohort\).](#)
- [Tobacco cessation: percent of patients currently not using tobacco \(mental health diagnosis cohort\).](#)

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Tobacco use cessation in the primary care setting. Department of Veterans Affairs (U.S.); 1999 May. Various p. [45 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1999 May

GUIDELINE DEVELOPER(S)

Department of Defense - Federal Government Agency [U.S.]
Veterans Health Administration - Federal Government Agency [U.S.]

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

Tobacco Use Cessation Workgroup

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Working Group Members: Peter Almenoff, MD; Karen Berkeley, Capt, USAF, MSC; Nancy Chapman, LTC, MS, USA; Linda Ferry, MD, MPH; Michael Geboy, PhD; Dallas C. Hack, LTC, MC, USA; Mylene Huynh, Major, USAF, MC; W. Robert Kiser, CAPT, MC, USN; Dennis Klatt, Capt, NC, USA; Deborah McKay, CDR, NC, USN; John Mitchell, Lt Col, USAF, MC; Eugene Moore, MD, MS, MPH, COL, MC, USA (Retired); Oliver Parr; Richard Suchinsky, MD; Robert Sullivan, MD; Oded Susskind, MPH; Nancy A. Swanson, CDR, NC, USN; Gerald W. Talcott, PhD, ABPP; Eric C. Westman, MD, MHS; Aaron Werbel, LT, MSC, USN

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

An update is not in progress at this time.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [Department of Veterans Affairs \(VA\) Web site](#).

Print copies: Available from the Department of Veterans Affairs, Veterans Health Administration (VHA), Office of Quality and Performance (10Q), 810 Vermont Ave. NW, Washington, DC 20420.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on May 1, 2001. The information was verified by the guideline developer as of November 1, 2001.

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